

ABSTRACT

The present invention includes: a first main waveguide 1; a T-branch circuit 3 connected thereto; a first low-pass filter 5 connected thereto; a band-pass filter 7 connected to the first T-branch circuit 3; a first converter 8 connected to the first low-pass filter 5 for converting transmission lines between a waveguide and a microwave integrated circuit; an amplifier 10 connected to the first converter and structured by the microwave integrated circuit; a second converter 9 connected thereto for converting transmission lines between a waveguide and the microwave integrated circuit; a second low-pass filter 6 connected thereto; a second T-branch circuit 4 connected to the second low-pass filter and the band-pass filter 7; and a second main waveguide 2 connected to the second T-branch circuit.